

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: 02232299 A

(43) Date of publication of application: 14.09.90

(51) Int. Cl

C11D 11/00
B01J 2/14

(21) Application number: 01053540

(22) Date of filing: 06.03.89

(71) Applicant: KAO CORP

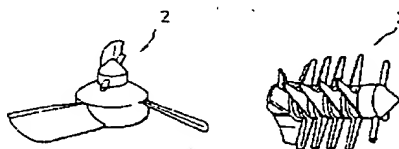
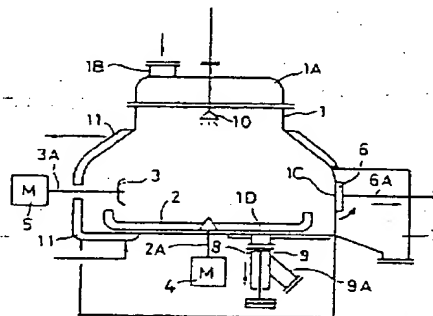
(72) Inventor:
TANIMOTO HITOSHI
MOTONO KOICHIRO
GOTO TAKUO

(54) METHOD AND APPARATUS FOR CONTINUOUS
GRANULATION TO PRODUCE HIGH DENSITY
DETERGENT GRAIN

(57) Abstract:

PURPOSE: To produce a high-density grain and to improve the dispersibility and solubility by feeding continuously a detergent powder into a granulation chamber wherein a stirring blade is rotated in the horizontal direction, stirring, mixing and granulating it and making the obtained grain overflow from an outlet on the lateral side of the granulation chamber.

CONSTITUTION: A detergent powder for high-density granular detergent consisting of a surface active agent, a builder, a surface modifier, a bulking filler, etc., is continuously fed from an inlet 1B of a granulation chamber 1 and is stirred and mixed by means of a stirring blade 2 rotating in the horizontal direction. While the powder repeats movements such as impingement against the side wall of the chamber 1 and rebounding, the powder grows by the action of a binder to granulate. On the other hand, excessively grown and coarsely granulated detergent powders are ground by the action of a grinding blade 3 and dressed. Coarsely granulated powders which tends to stay in the center of the chamber 1 are taken out by opening intermittently a valve 8. The detergent grains are thereby dressed in the chamber 1 so as to have given grain size and overflows from an outlet 1C on the side wall of the chamber 1 and are taken out of an outlet 1D, too.



COPYRIGHT: (C)1990,JPO&Japio